

IMO PRECISION CONTROLS

INDUSTRIAL LIMIT SWITCHES

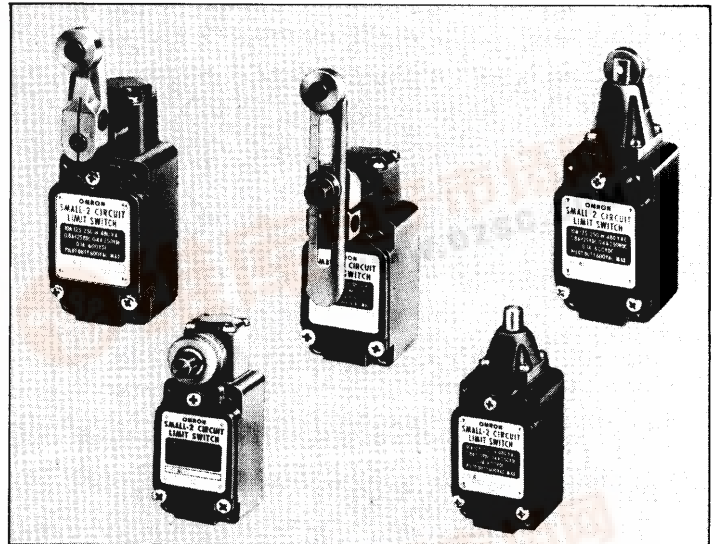


103-895

High Capacity Two Circuit OEM Limit Switch Range

FEATURES

- Rugged Die cast housing.
- 20mm conduit entry.
- High mechanical strength.
- Oiltight, waterproof and dustproof construction IP67.
- Very low cost.
- Wide temperature operating band.

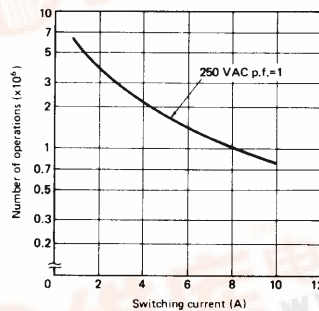


SPECIFICATIONS

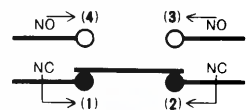
CONTACT RATINGS

Rated Voltage (V)	Non-inductive load (A)				Inductive load (A)			
	Resistive load		Lamp load		Inductive load		Motor load	
	NC	NO	NC	NO	NC	NO	NC	NO
125 VAC	10	10	3	1.5	10	5	2.5	
250 VAC	10	10	2	1	10	3	1.5	
480 VAC	10	10	1.5	0.8	3	1.5	0.8	
600 VAC	3	1	1	0.5	1.5	1	0.5	
8 VDC	10		6	3	10		6	
14 VDC	10		6	3	10		6	
30 VDC	6		4	3	6		4	
125 VDC	0.8		0.2	0.2	0.8		0.2	
250 VDC	0.4		0.1	0.1	0.4		0.1	

ELECTRICAL LIFE



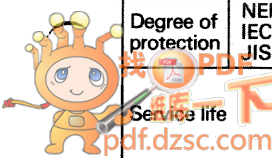
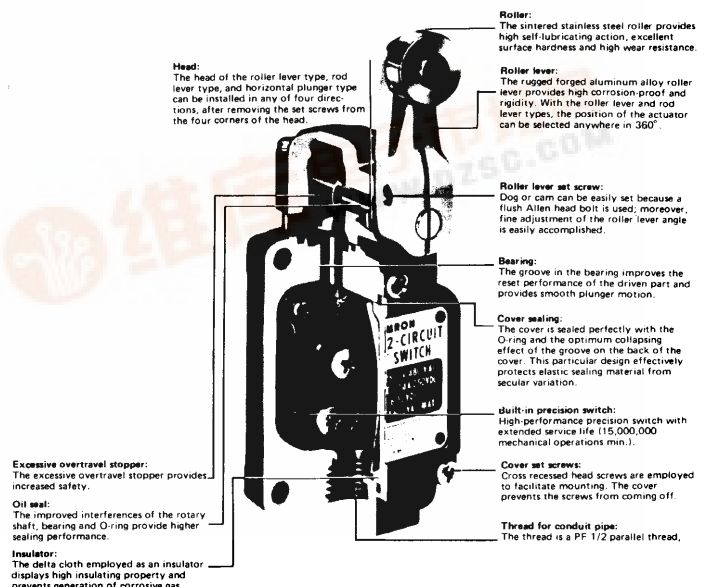
CONTACT ARRANGEMENT



CHARACTERISTICS

Operating speed	1mm to 2m/sec (with Type WLCA2)
Operating frequency	Mechanically: 120 operations/min. Electrically: 30 operations/min.
Contact resistance	25mΩ max. (initial)
Insulation resistance	100MΩ min. (at 500 VDC)
Dielectric strength	1,000 VAC, 50/60Hz for 1 minute between non-continuous terminals; 2,200 VAC, 50/60Hz for 1 minute between each terminal and non-current-carrying metal part and between each terminal and ground
Temperature rise	50 degrees max.
Vibration	Malfunction durability: 10 to 55Hz; 1.5mm double amplitude
Shock	Mechanical durability approx. 1,000m/sec ² (approx. 100G's) Malfunction durability: approx. 300m/sec ² (approx. 30G's)
Ambient temperature	Operating: -5 to + 80°C
Humidity	95% RH max.
Degree of protection	NEMA Type 6 IEC IP-67 JIS Immersion-proof
Service life	Mechanically: 15,000,000 operations min. Electrically: 800,000 ops. min. @ full load
Weight	Approx. 275g (with Type WLCA2)

CONSTRUCTION



AVAILABLE TYPES

O.F.	Operating Force
R.F.	Release Force
P.T.	Pre Travel
O.T.	Over Travel
M.D.	Movement Differential
T.F.	Total Force
O.P.	Operating Position

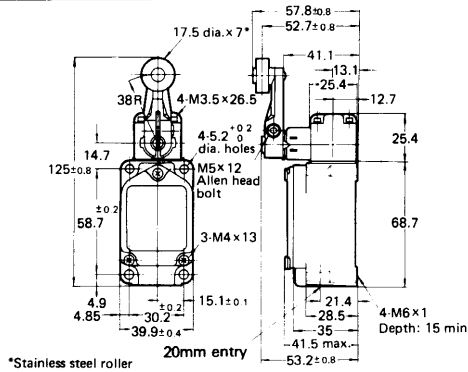
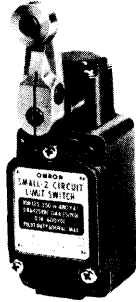
Type

Dimensions

Specifications

Spare Actuator

Roller lever type
WLCA2G

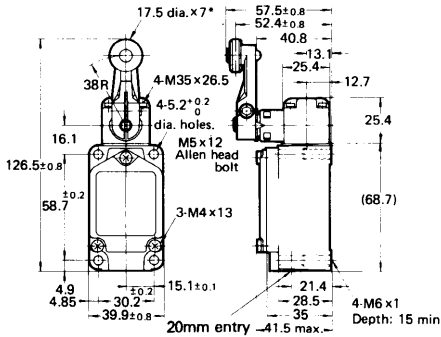
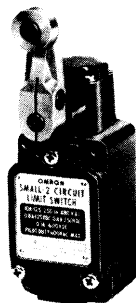


*Stainless steel roller

O.F. (max.)	1,360g
R.F. (min.)	227g
P.T. (max.)	20°
O.T. (min.)	25°
M.D. (max.)	12°
T.F. (max.)	2,720g
T.T. (min.)	—

AL 1001

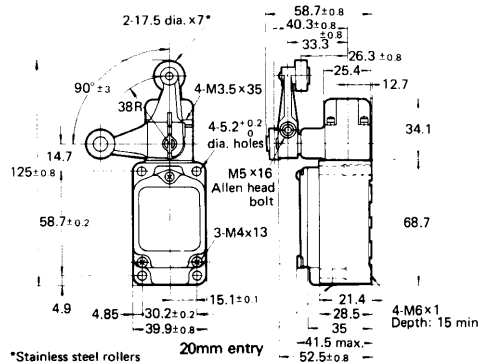
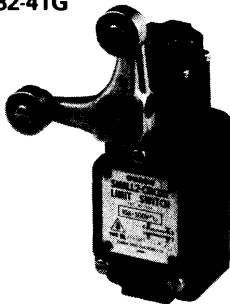
Roller lever type with
extended
overtravel
WLCA2-2G



O.F. (max.)	900g
R.F. (min.)	50g
P.T. (max.)	30°
O.T. (min.)	60°
M.D. (max.)	16°

AL 1001

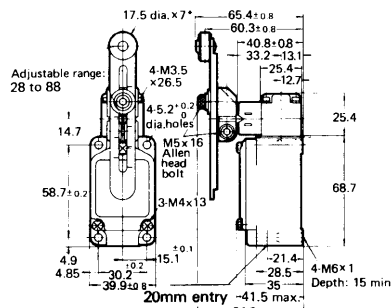
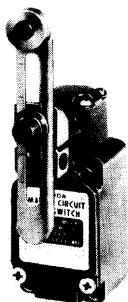
Fork lever lock type
WLCA32-41G



*Stainless steel rollers

O.F. (max.)	1,200g
R.F. (min.)	—
P.T. (max.)	55°
O.T. (min.)	35°
M.D. (max.)	—
T.F. (max.)	—
T.T. (min.)	90±10°

Adjustable roller lever type
WLCA12G



*Stainless steel roller

O.F. (max.)	1,360g
R.F. (min.)	227g
P.T. (max.)	20°
O.T. (min.)	25°
M.D. (max.)	12°
T.F. (max.)	2,720g
T.T. (min.)	—

AL 1401

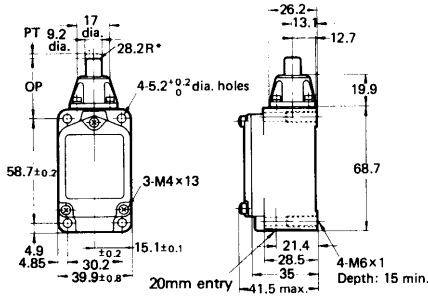
Type

Dimensions

Specifications

Spare Actuator

Plunger type
WLDG

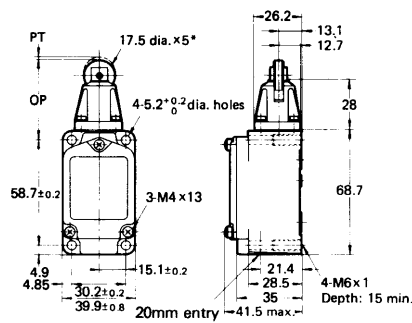


*Stainless steel plunger

O.F. (max.)	2,720g
R.F. (min.)	910g
P.T. (max.)	1.7mm
O.T. (min.)	6.4mm
M.D. (max.)	1mm
T.F. (max.)	—
O.P. (min.)	34±0.8mm

AL1601

Roller plunger type
WLD2G

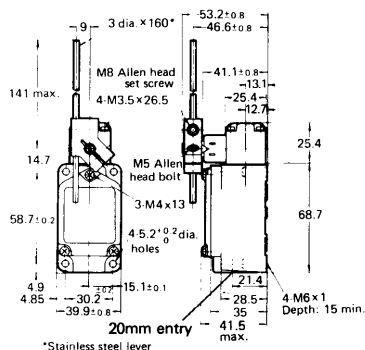


*Stainless steel roller

O.F. (max.)	2,720g
R.F. (min.)	910g
P.T. (max.)	1.7mm
O.T. (min.)	5.6mm
M.D. (max.)	1mm
T.F. (max.)	—
O.P. (min.)	44±0.8mm

AL1611

Rod lever
WLCLG

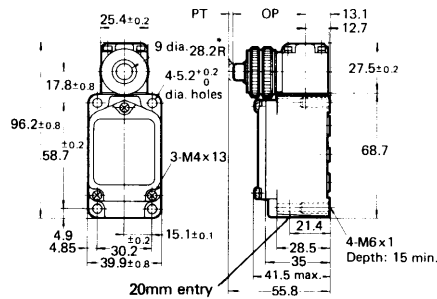
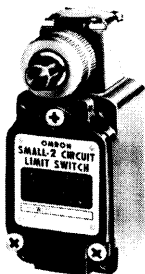


*Stainless steel lever

O.F. (max.)	142g
R.F. (min.)	28g
P.T. (max.)	20°g
O.T. (min.)	25°
M.D. (max.)	12°
T.F. (max.)	200g
O.P.	

AL1501

Horizontal plunger type
WLSDG

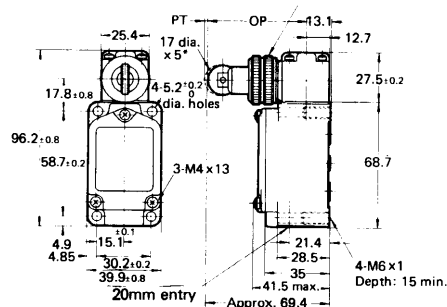
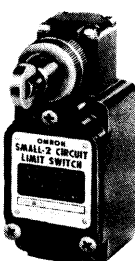


*Stainless steel plunger

O.F. (max.)	4,082g
R.F. (min.)	907g
P.T. (max.)	2.8mm
O.T. (min.)	6.4mm
M.D. (max.)	1mm
T.F. (max.)	—
O.P.	40.6±0.8mm

AL1651

Horizontal roller plunger type
WLS2G

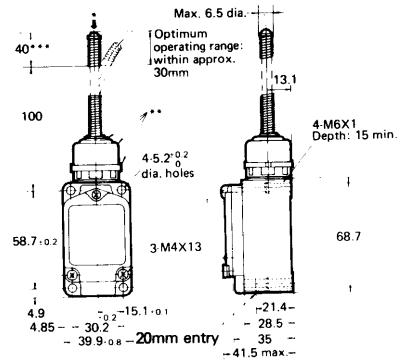
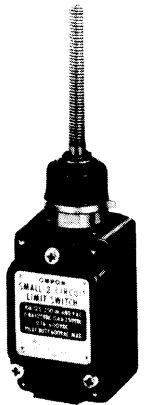


O.F. (max.)	4,082g
R.F. (min.)	907g
P.T. (max.)	2.8mm
O.T. (min.)	5.6mm
M.D. (max.)	1mm
O.P.	54.2±0.8mm

AL1661

Type **Dimensions** **Specifications** **Spare Actuator**

Coil spring type
WLNJG

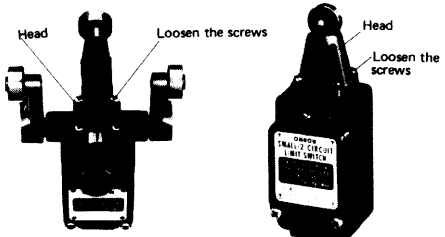


O.F. (max.)	150g
R.F. (min.)	—
P.T. (max.)	2.8mm

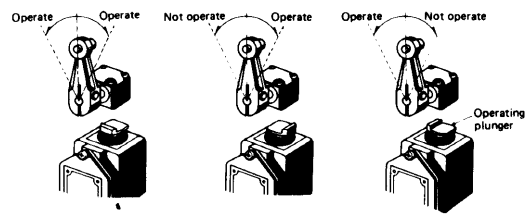
AL 1701

APPLICATION EXAMPLES

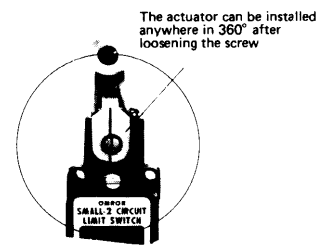
• **Actuator Rotation**



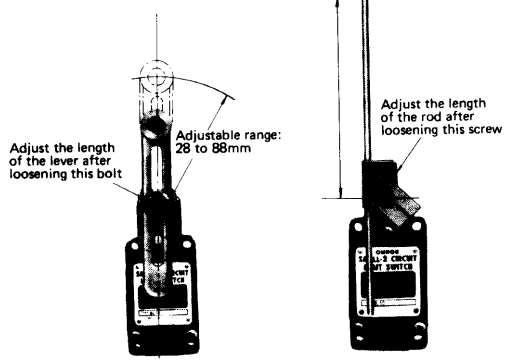
• **Directional Operation**



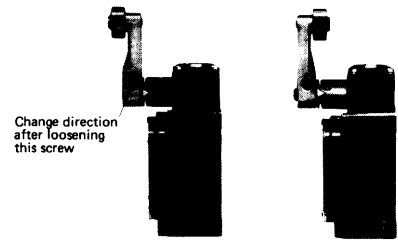
• **Actuator Positioning**



• **Actuator Adjustment**



• **Actuator Reversal**



ACCESSORY

Interior Switch Block
WL-B3

